

# Operational Considerations for Immunization Services during COVID-19 in Non-US Settings Focusing on Low-Middle Income Countries

Accessible version: [www.cdc.gov/coronavirus/2019-ncov/global-covid-19/maintaining-immunization-services.html](http://www.cdc.gov/coronavirus/2019-ncov/global-covid-19/maintaining-immunization-services.html)



## Background

Immunization services have been disrupted significantly during the COVID-19 pandemic, threatening the achievements in the eradication and elimination of major vaccine-preventable diseases (VPDs) like polio and measles. More than 80 million children under the age of one are estimated to be affected by disruptions in routine immunization services in more than 68 countries and are at risk of polio, measles, diphtheria, pertussis, tetanus, hepatitis B, Hemophilus influenzae type b, pneumococcus, and rotavirus infections (1). As of June 1, 2020, approximately 125 mass vaccination campaigns against polio, measles, meningitis A, yellow fever, typhoid, cholera, and tetanus had been postponed.

In many countries, immunization services have been disrupted as a result of:

- Unavailability of healthcare workers as a result of their deployment to the COVID-19 response.
- Lack of personal protective equipment (PPE) to conduct immunization activities during COVID-19.
- Healthcare workers' fear about contracting COVID-19.
- Lack of vaccines due to closure of country borders as a result of COVID-19.
- Reduced demand for immunization services due to unwillingness or inability of parents to leave their homes due to fear of COVID-19.



## Purpose

The purpose of this document is to provide operational considerations for the implementation of immunization services during the COVID-19 pandemic in non-US settings. Its intended users are CDC country offices, immunization program managers, and staff from partner immunization programs. These considerations are meant to supplement—not replace—any local health and safety laws, rules, and regulations.

This document provides a summary of global guidance on immunization services during COVID-19 as of June 12, 2020. It complements and provides reference to more detailed technical guidance from the World Health Organization, UNICEF, and the Global Polio Eradication Initiative including:

- [Guiding principles for immunization activities during the COVID-19 pandemic: interim guidance](#)
- [Frequently Asked Questions: Immunization in the context of COVID-19 pandemic](#)
- [Framework for decision-making: implementation of mass vaccination campaigns in the context of COVID-19: Interim guidance](#)
- [Polio eradication programme continuity: implementation in the context of the COVID-19 pandemic](#)



## Implementation of vaccination sessions during COVID-19

- Immunization services are essential and should be maintained whenever possible during the COVID-19 pandemic to prevent outbreaks of vaccine-preventable diseases (VPDs) and protect children (2,3).
- Immunization delivery strategies need to be adapted depending on the VPD risk and COVID-19 situation in each country (see Table) (3–6).
- National Immunization Technical Advisory Groups (NITAGs) should be involved in decision making with regards to scheduling and implementation of routine immunization services and mass vaccination campaigns.
- Healthcare workers should regularly inform communities about the status and availability of routine immunization services and mass campaigns. Regular communication will help to reduce confusion about availability and purpose of immunization services, increase awareness of the necessary precautions in place at the immunization session site to prevent SARS-CoV-2 transmission and prepare community members who need to attend the vaccination session.
- It is likely that measures to reduce SARS-CoV-2 transmission and ensure the health and safety of both health workers and clients will remain in place for some time. Special considerations for setting up the vaccination site and maintaining good infection prevention and control (IPC) practices should be followed (4) (see Annex in Framework for decision-making: implementation of mass vaccination campaigns in the context of COVID-19: Interim guidance for detailed IPC and PPE recommendations)
  - » Recommendations for vaccination site:
    - Conduct vaccination in a well-aerated area and implement frequent disinfection focusing on high-touch surfaces, using products effective against SARS-CoV-2.



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- Reconfigure waiting rooms to allow for at least 2 meters (6 feet) distance between people and limit entry to only one companion per vaccination recipient. In situations where people will form lines, encourage people to stay at least 2 meters (6 feet) apart by providing signs or other visual cues such as tape or chalk marks.
  - Consider increasing the duration of the vaccination session and/or number of vaccination sites so that people can maintain physical distancing of at least 2 meters (6 feet).
  - People with pre-existing medical conditions should have separate vaccination sessions.
  - Separate vaccination sites from curative services by using different locations or allocating different hours.
  - Alcohol-based hand sanitizer with a minimum of 60% alcohol or a hand washing station with soap and water, paper towels, and trash can (hands-free) need to be available and should be used by every person entering the vaccination site and by healthcare workers to perform hand hygiene after every client.
  - Maintain 2 meters (6 feet) distance when possible between people at the vaccination site.
  - Prior to entry into the vaccination site, screen vaccination recipients and companions for COVID-19 symptoms and exposure risk. Those who screen positive should be offered a mask then referred to the relevant part of the health system for further COVID-19 evaluation. If feasible offer vaccination at the COVID-19 evaluation site or, if not feasible, postpone vaccination for 14 days after symptom resolution or 2 negative tests conducted at least 24 hours apart.
- » Recommendations for vaccinators
- Vaccinators should not come to the vaccination session if they have symptoms suggestive of COVID-19 or have been exposed to a person infected with SARS-CoV-2. Please see return to work guidance for healthcare professionals for further details on when vaccinators can return to work.
  - Maintain hand hygiene after interaction with each client/vaccine recipient by washing hands with soap and water for at least 20 seconds or using hand sanitizer with a minimum of 60% alcohol.
  - Vaccinators should wear masks throughout the vaccination session, especially in areas with widespread community transmission of COVID-19.



## Catch-up vaccination

- Disruption to routine immunization services and reduced demand for these services will lead to missed vaccinations. However, the recommended immunization schedule should always be initiated at the earliest opportunity.
- To close immunity gaps created by any disruption to routine immunization services, countries need to plan for and implement catch-up vaccination at routine immunization services (fixed, outreach, mobile, and school-based). Some countries may also choose a 'campaign' style "periodic intensification of routine immunization" (PIRI) approach to provide more intensive and large-scale opportunity to receive any nationally recommended vaccines that have been missed (7).
- A catch-up vaccination policy or guideline and a catch-up schedule are essential components of an immunization program. Development or revision of catch-up policy or guidance should be done in collaboration with the NITAG and be officially disseminated to all healthcare staff involved in managing and delivering immunization services. Guidance on target age ranges, number of doses for each vaccine, minimum intervals between doses of the same vaccine, reminder that there is no need to repeat previous doses, and where and how to report vaccine doses that are given outside the recommended age range should be included.
- The WHO recommendations for interrupted or delayed immunization will help inform development of catch-up policy and guidelines. Examples of catch-up vaccination schedule for the United States is available from CDC.
- Missed vaccine doses that are provided to individuals outside the recommended age range should still be recorded on the home-based record (HBR) of vaccination and reported through the usual immunization information system. Doses should always be recorded in accordance with the number of doses in sequence, regardless of age.
- Engagement with communities and implementation of communication strategies are essential to re-establish community demand for vaccination and increase awareness that it is not too late to vaccinate. Key messaging should be on increasing awareness that individuals are still eligible to come for missed vaccinations, that late vaccination still provides a high level of protection against disease, continued high safety of late vaccinations, and ensuring that individuals know when and where immunization services are currently being provided as well as the safety precautions being taken for delivery of services.

**Table. Framework for provision of various immunization services during the COVID-19 pandemic by degree of community transmission of COVID-19\***

	None to minimal community transmission of COVID-19.	Minimal to moderate Community transmission of COVID-19.	Substantial community transmission of COVID-19.
	<i>Evidence of isolated cases or limited community transmission, case investigations underway, no evidence of exposure in large communal setting.</i>	<i>Sustained transmission with high likelihood or confirmed exposure within communal settings with potential for rapid increase in cases.</i>	<i>Large scale community transmission, multiple cases within communal settings (e.g. healthcare facilities, schools, workplaces, mass gatherings, etc.)</i>
Immunization Delivery platform			
<b>Routine immunization (RI) platform (fixed, outreach, school, mobile) (3,5)</b>	<p>Fixed RI sessions and newborn (BCG, OPV, HepB) vaccination should continue.</p> <p>Outreach and mobile sessions can continue if there is no evidence of local transmission.</p> <p>School-based vaccination can continue if schools are open and are allowing such activities.</p>	<p>Fixed RI sessions and newborn (BCG, OPV, HepB) vaccinations should continue.</p> <p>Outreach, mobile and school-based vaccination might need to be suspended depending on local situation.</p>	<p>Fixed RI sessions and newborn (BCG, OPV, HepB) vaccinations should continue.</p> <p>Suspend outreach, mobile and school-based vaccination and re-evaluate the situation weekly by conducting a risk-benefit analysis. **</p>
<b>Mass vaccination campaign (preventative supplementary immunization activity, outbreak response immunization, PIRI***) (4,6,7)</b>	<p>Mass campaigns can continue while maintaining standard IPC measures and using PPE.</p>	<p>Assess the risks and benefits** of the mass vaccination campaign based on local VPD morbidity. Consider modified approaches to vaccine delivery and If campaign is conducted provide appropriate PPE and implement standard IPC to prevent COVID-19 spread.</p>	<p>Mass vaccination campaigns should be temporarily suspended and re-evaluate the situation weekly by conducting a risk-benefit analysis** assessing risk of delayed campaign on morbidity and mortality of the VPD and potential to increase COVID-19 transmission.</p>
<b>VPD surveillance (5)</b>	<p>VPD surveillance activities should continue as usual.</p>	<p>At a minimum surveillance for VPDs with eradication and elimination goals should continue. Identify critical VPD surveillance activities that need to continue. Active surveillance can be maintained if surveillance officers are provided with PPE.</p>	<p>Identify critical VPD surveillance activities that need to continue. Community-based surveillance should be suspended.</p>

\* For all activities, standard IPC measures need to be followed irrespective of the degree of community transmission

\*\* See Figure 1 in Framework for decision-making: implementation of mass vaccination campaigns in the context of COVID-19: Interim guidance

\*\*\* PIRI: periodic intensification of routine immunization consists of an intensified “campaign style” immunization sessions and can be used for catch-up vaccination

## References:

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4. World Health Organization. Framework for decision-making: implementation of mass vaccination campaigns in the context of COVID-19: Interim guidance 20 May 2020. Geneva: World Health Organization. Available at: <https://www.who.int/publications-detail/framework-for-decision-making-implementation-of-mass-vaccination-campaigns-in-the-context-of-covid-19> (Accessed May 21, 2020)
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